

COMMONWEALTH OF KENTUCKY
BEFORE THE PUBLIC SERVICE COMMISSION

In the Matter of:

LOUISVILLE GAS AND ELECTRIC COMPANY)	
)	
_____)	CASE NO. 91-095
)	
ALLEGED FAILURE TO COMPLY WITH COMMISSION)	
REGULATIONS)	

SHOW CAUSE ORDER

Louisville Gas and Electric Company ("LG&E"), a Kentucky corporation engaged in the distribution and sale of natural gas to the public, for compensation, for light, heat, power or other uses, is a utility under the jurisdiction of the Commission. KRS 278.010(3)(b).

KRS 278.040(3) authorizes the Commission to promulgate reasonable regulations to implement the provisions of KRS Chapter 278 and to investigate the methods and practices of utilities. Pursuant to this authority, the Commission promulgated 807 KAR 5:022, Section 13(8)(a), which requires each operator of a buried pipeline to carry out a written program to prevent damage to that pipeline from excavation activities. Pursuant to 807 KAR 5:022, Section 13(8)(b)5 and Section 13(8)(b)6, such program must include temporary marking of buried pipelines in the area of excavation activity and inspection of pipelines as frequently as necessary during and after the excavation activities to verify the integrity of the pipeline.

The Commission Staff prepared a March 29, 1990 Incident Report, attached hereto as Appendix A, which alleges that:

1. On January 18, 1990 an explosion occurred at 3602 Taylorsville Road, Louisville, Kentucky, resulting in injuries to one individual.

2. Prior to the explosion, a contractor for LG&E was excavating in front of 3602 Taylorsville Road for the relocation of a two inch steel gas main. During the excavation, the contractor pulled a 3/4 inch customer service line with a backhoe bucket. As a result of being pulled by the backhoe, the service line was damaged at the corner of the foundation of the residence at 3602 Taylorsville Road.

3. LG&E's practice is to not locate pipelines on private property and to only locate company-owned pipelines.

4. After the service line at 3602 Taylorsville was pulled during excavation activities, no inspection was conducted to verify the line's integrity.

Based on a review of the Incident Report, and being advised, the Commission finds that a prima facie case has been made that LG&E violated 807 KAR 5:022, Section 13(8)(a) and Section 13(8)(b)5, by failing to carry out a written program which provides for the temporary marking of buried pipelines in the area of excavation activity to prevent damage to the pipelines, and violated 807 KAR 5:022, Section 13(8)(a) and Section 13(8)(b)6, by failing to carry out a written program for the frequent inspection of the service line at 3602 Taylorsville Road to verify its integrity during excavation activities.

The Commission, on its own motion, HEREBY ORDERS that:

1. LG&E shall show cause why it should not be subject to the penalties prescribed in KRS 278.992 for the probable violations of 807 KAR 5:022, Section 13(8)(a), Section 13(8)(b)5, and Section 13(8)(b)6.

2. LG&E shall file within 14 days of the date of this Order a written response to the probable violations noted herein.

3. An informal conference shall be held on April 19, 1991, at 9:30 a.m., Eastern Daylight Time, in Conference Room 1 of the Commission's offices at 730 Schenkel Lane, Frankfort, Kentucky, for the purposes of discussing the Incident Report and LG&E's response to this Order, and exploring the potential for submitting a stipulation of facts.

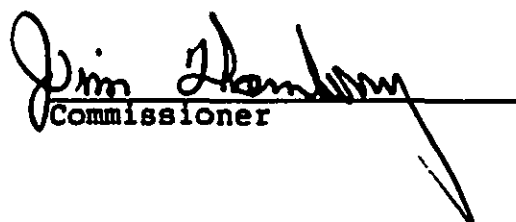
4. The Incident Report, attached hereto as Appendix A, shall be made a part of the record in this case.

Done at Frankfort, Kentucky, this 2nd day of April, 1991.

PUBLIC SERVICE COMMISSION


Chairman


Vice Chairman


Commissioner

ATTEST:


Executive Director

COMMONWEALTH OF KENTUCKY
PUBLIC SERVICE COMMISSION

INCIDENT REPORT

Louisville Gas & Electric Company
Louisville, Kentucky

March 29, 1990

BRIEF

On January 18, 1990, an explosion occurred at 3602 Taylorsville Road, Louisville, Kentucky. One person, Marshall Wilson, suffered second and third degree burns over 50% of his body. Mr. Wilson stated he was trying to light his furnace. Louisville Gas & Electric Company (LG&E) notified our staff of the incident as required. Utility contractors were working in the area to accommodate proposed road construction.

INSPECTION

On January 18, 1990, Southern Pipeline, Inc., (SPL) contractor for LG&E, was digging in front of 3602 Taylorsville Road for the relocation of a 2" steel gas main. During the excavation, SPL pulled a 3/4" customer service line with a backhoe bucket.

This service line, which delivers gas to the house from the existing 2" main at 20 psig, was not located and marked by LG&E prior to the incident. LG&E contracts all locating duties to Heath Consultants (Heath). However, it has been a practice of LG&E not to locate on private property and to only locate company-owned pipelines. This practice still exists with Heath doing the locating. 807 KAR 5:022, Section 13(8)(b)5, does not specify company-owned or customer-owned lines. This line existed on recently acquired public property which was purchased to accommodate road improvements.

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After Claude Wheatley, the backhoe operator for SPL, apparently disturbed the service line by hooking the backhoe bucket under the line, he did not notify LG&E or the LG&E inspector, Norm Nevitt. LG&E company procedures require it to investigate all facilities whenever a pipeline has been disturbed. After completing the work in the area of 3602 Taylorsville Road, the backhoe operator left the scene.

Approximately 2 hours later, Mr. Wilson came home and entered the house through the front door. Shortly after he entered, the explosion occurred. An LG&E inspector was in the area and was able to shut off the gas supply shortly after the incident. Mr. Wilson ran out of his house with his clothing burning. His neighbor, Diana Williams, smothered out the flames. Mr. Wilson was then taken to the hospital and listed in critical condition.

LG&E immediately began in its attempt to determine the cause of the explosion. After the customer service line was cut and capped at the curb box, natural gas was detected around the foundation of the house and over the service line. Readings were as high as 100% LEL, but pumped out almost instantly. Gas was no longer leaking, but traces were being held in the ground by the wet soil conditions. LG&E tried to test the customer's service line from the meter to the curb box valve, but was unable to pressurize the line. The house line from the meter to the appliance stops held the test pressure.

The open trench, approximately 18" from SPL digging, showed only an apparent slight bend in the service line. (See photo 1). However, the decision was made to excavate the service line entirely. This revealed the service line was pulled several inches (See photos 2 and 3). It was suspected that the line was cracked or broken under the walkway leading to the front porch. This area was tunnelled out and found to be intact. Therefore, the digging continued toward the house, exposing the service line. At the corner of the foundation, two 90° ells were installed with a short (8") nipple between the two ells. At this time, to save some efforts in digging, air was blown into the line to determine if the leaks were in this area. Water blew out from the service line where threads on the short nipple connected to one of the 90° ells. This revealed the leak on the customer service line. The two 90° ells and nipple were cut out, and each end of the remaining service line was capped. Then another pressure test was tried on each separate end, and the lines held 50 psig. Therefore, it was concluded that no other leaks existed, and the digging was stopped.

CONCLUSIONS AND FINDINGS

Two factors led to this explosion and fire at 3602 Taylorsville Road. First, the customer's service line was not located and marked. Under state and federal regulations, this customer service line is jurisdictional piping and must conform to all regulations. Therefore, LG&E is in violation of 807 KAR 5:022,

Section 13(8)(b)5, of the Kentucky Public Service Commission regulations and 49 CFR Part 192.614(b)(5) of the Federal Department of Transportation, Office of Pipeline Safety, regulations for not locating buried pipelines in an area of excavation.

Secondly, the contractor, SPL, after damaging the service line, failed to notify LG&E personnel who could have taken steps to prevent the gas from migrating into the house.

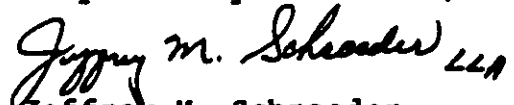
RECOMMENDATIONS

It is therefore recommended that LG&E begin a program to locate all buried pipelines in an excavation area, including customer service lines, when requested by "BUD" calls, contractors, or customers.

It is also recommended that LG&E show cause why it should not be penalized for not locating this pipeline, which was a factor in the occurrence of this accident, as required by 807 KAR 5:022, Section 13(8)(b)5.

Finally, it is recommended that LG&E reply to these findings before April 27, 1990 as requested.

Respectfully submitted,


Jeffrey M. Schroeder
Utility Investigator

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